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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO WENZEL D 3596.02-1 09/228,821 01/11/99 **EXAMINER** IM22/0718 JOHNSON. HOWARD M PETERS PAPER NUMBER **ART UNIT** PETERS VERNY JONES & BIKSA 385 SHERMAN AVENUE SUITE 6 PALO ALTO CA 94306-1840 1764 **DATE MAILED:**

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

07/18/01



UNITED STATES PARTMENT OF COMMERCE Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

IM22/0718

HOWARD M PETERS
PETERS VERNY JONES & BIKSA
385 SHERMAN AVENUE SUITE 6
PALO ALTO CA 94306-1840

| APPLICATION NO. | FILING DATE | TOTAL CLAIMS E | | EXAMINER AND GROUP ART UNIT | | DATE MAILED |
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| 09/228,821 | 01/11/99 | 020 | JOHNSON, | Ĵ | 1764 | 07/18/01 |
| First Named WENZEL, | | - 35 | USC 154(b) | term ext. | = 0 Day: | i e |

TITLE OF COMPOSITION AS AN ADDITIVE TO CREATE CLEAR STABLE SOLUTIONS AND MICROEMULSIONS WITH A COMBUSTIBLE LIQUID FUEL TO IMPROVE COMBUSTION

| ATTY'S DOCKET NO: | CLASS-SUBCLASS | BATCH NO. | APPLN. TYPE | SMALL ENTITY | FEE DUE | DATE DUE |
|-------------------|----------------|-----------|-------------|--------------|----------|------------|
| 1 3596.02-1 | 044-302. | 000 J: | 39 UTILI | TY YES | \$620.00 | 10/18/01 - |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
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- III. All communications regarding this application must give application number and batch number.

 Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PATENT AND TRADEMARK OFFICE COPY

| | Application ito: | Approunts | |
|--|---|---|--|
| Notice of Alleman 114. | 09/228,821 | WENZEL, DEBORAH | |
| Notice of Allowability | Examiner | Art Unit | |
| | Jerry D. Johnson | 1764 | |
| The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to | lication. If not included will be mailed in due course. THIS | |
| This communication is responsive to the amendment filed The allowed claim(s) is/are 1.59-70 and 78-84. The drawings filed on are accepted by the Examine Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the: | r. ler 35 U.S.C. § 119(a)-(d) or (f). | | |
| Certified copies of the priority documents have | | | |
| Certified copies of the priority documents have Copies of the certified copies of the priority documents International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | | ··· | |
| 5. Acknowledgment is made of a claim for domestic priority under (a) The translation of the foreign language provisional a 6. Acknowledgment is made of a claim for domestic priority under the content of the conte | pplication has been received. | onal application). | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of | this communication to file a reply co | mplying with the requirements noted | |
| 7. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which gives reas | | | |
| 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers. 1) hereto or 2) to Paper No (b) including changes required by the proposed drawing of the control of the control of the proposed drawing of the control of the contr | correction filed, which has be | en approved by the Examiner. | |
| Identifying indicia such as the application number (see 37 CFR 1. of each sheet. The drawings should be filed as a separate paper | 84(c)) should be written on the drawin with a transmittal letter addressed to t | gs in the top margin (not the back) he Official Draftsperson. | |
| 9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T | | | |
| Attachment(s) | | | |
| 1 ☐ Notice of References Cited (PTO-892) 3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5 ☐ Information Disclosure Statements (PTO-1449), Paper No 7 ☐ Examiner's Comment Regarding Requirement for Deposit | 4⊠ Interview Summa 6⊠ Examiner's Amer | I Patent Application (PTO-152) bry (PTO-413), Paper No. <u>24</u> . adment/Comment ment of Reasons for Allowance | |

of Biological Material

9 Other

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Page, 2 / 6.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Peters on July 17, 2001.

Please enter the following amendment:

In the claims:

Claims 60-63, 65-67, 69, 70 and 78-84, line 1 of each, delete "additive" and insert therefor -- combustible fuel composition --

Cancel claim 77.

Claim 64. A combustible fuel composition of diesel fuel and additive as a clear microemulsion with water present wherein said additive comprises:

- (a) ethanol having between 0.5 and 10 % water by volume of ethanol;
- (b) one or more alcohols selected form the group consisting of:
 - (i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms
- (ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms,
 - (iii) combinations of b(i) and b(ii);
- (c) a fatty acid of the structure R-(C=O)-OH, wherein R is alkyl or alkylene having between about 10 to 24 carbon atoms, in combination with ammonia or urea in an anhydrous

and

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state or as an aqueous solution and the ammonia or urea is present sufficient to neutralize about 40-80 % of the fatty acid;

wherein components a, b, and c, as the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition having a viscosity with \pm 10 % of the original viscosity of the diesel fuel, and wherein the ratio of diesel fuel to additive ranges from about 50:50 to 99:1 by volume, with the proviso that water is present in the composition sufficient to form the microemulsion and with the proviso ethylene oxide condensation and ethylene oxide esterification products are completely eliminated.

Claim 68. A combustible fuel composition of diesel fuel and additive as a clear microemulsion with water present wherein said additive comprises:

- (a) ethanol having between 10 and 25 % water by volume of ethanol;
- (b) one or more alcohols selected form the group consisting of
 - (i) straight- or branched-chain alcohols having between 3 and 5 carbon atoms
 - (ii) straight- or branched-chain alcohols having between 6 and 12 carbon atoms,

(iii) combinations of b(i) and b(ii);

(c) a fatty acid of the structure R-(C=O)-OH, wherein R is alkyl or alkylene having between about 10 to 24 carbon atoms, in combination with ammonia or urea in an anhydrous state or as an aqueous solution and the ammonia or urea is present sufficient to neutralize about 40-80 % of the fatty acid;

and

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wherein components a, b, and c, as the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition having a viscosity with \pm 10 % of the original viscosity of the diesel fuel, and wherein the ratio of diesel fuel to additive ranges from about 50:50 to 99:1 by volume, with the proviso that water is present in the composition sufficient to form the microemulsion and with the proviso ethylene oxide condensation and ethylene oxide esterification products are completely eliminated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (703) 308-2515. The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode can be reached on (703) 308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5408 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jerry D. Johnson Primary Examiner Art Unit 1764

JDJ July 17, 2001